

Demonstration and Sentinel Surveillance System for Ongoing and Continuous Monitoring of PPE (Respirator) Usage by Healthcare Workers (HCW) in the US.

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Objectives

- Utilize the Vanderbilt Occupational Health Information System (VOHIS) to gather data about HCW protection related to PPE: selection, usage, supply, ordering, defects, fitting, safety programs and implementation
- Determine what specific activities and resources are utilized by the hospital systems in their hazard prevention programs (HPP)
- Evaluate the quality and effectiveness of PPE in HPP
- Use system to demonstrate and report best practices of PPE in HPP

Background

- 13 Million workers in healthcare
- IOM report Preparing for an Influenza Pandemic: PPE for Healthcare Workers (2008) states PPE is a vital component of a system safety controls and preventive measures used in healthcare facilities
- Value of monitoring and evaluating the activities and resources regarding PPE use among HCWs and safety prevention programs in hospital systems not formally assessed (Figure 1)

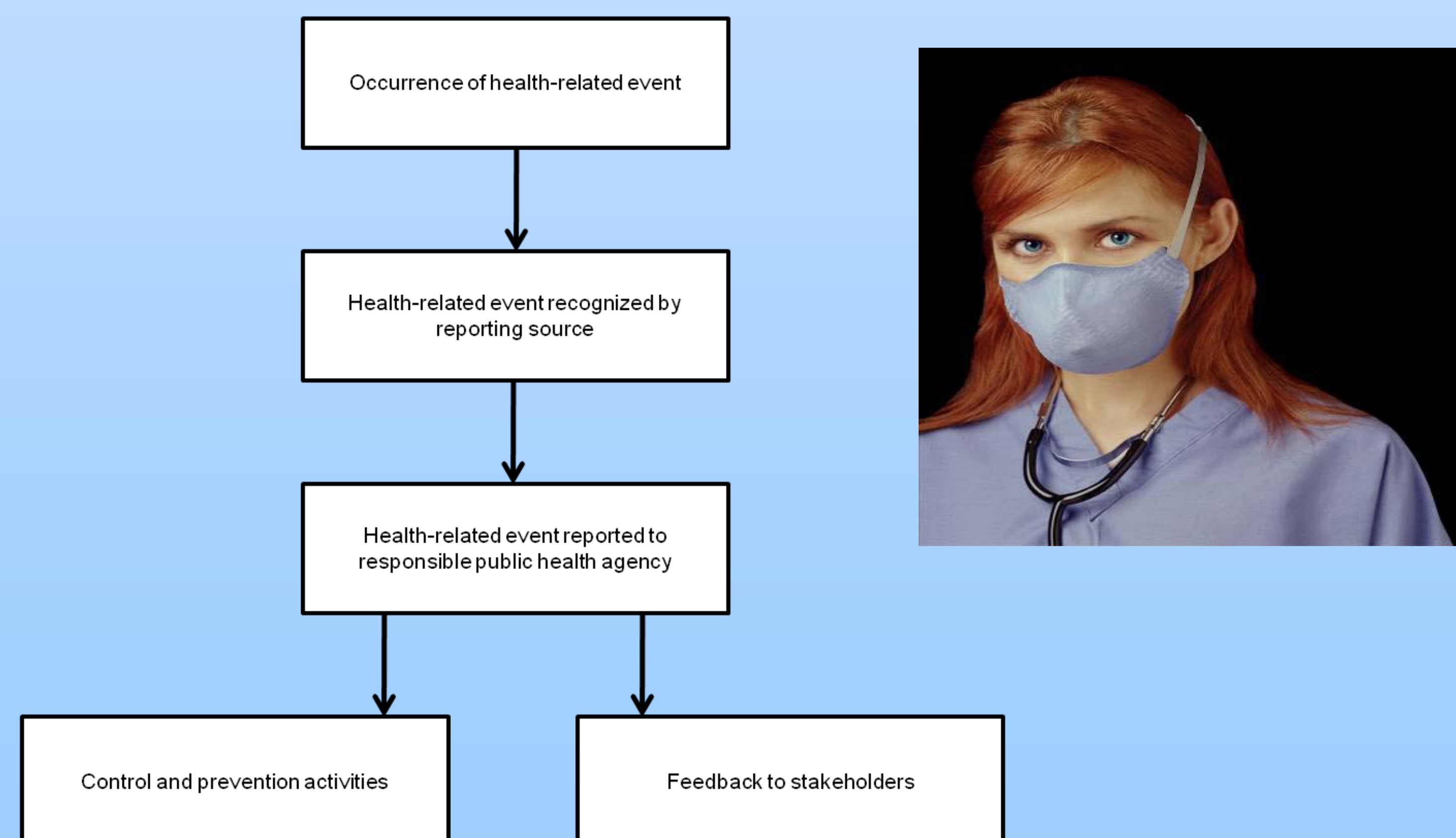


Figure 1. Simplified example of steps in a surveillance system

Methods

- Examine current state of medical center PPE usage surveillance at the national level
- Survey top hospitals and state/national agencies
- Survey HCW knowledge, attitudes, and beliefs about N-95 respirators
- Survey HCWs exposed to airborne infection

Criteria Evaluation

- Acceptability
- Cost
- Specificity
- Feasibility
- Standardization & Harmonization
- Flexibility
- Timeliness
- Sensitivity
- Data collection points

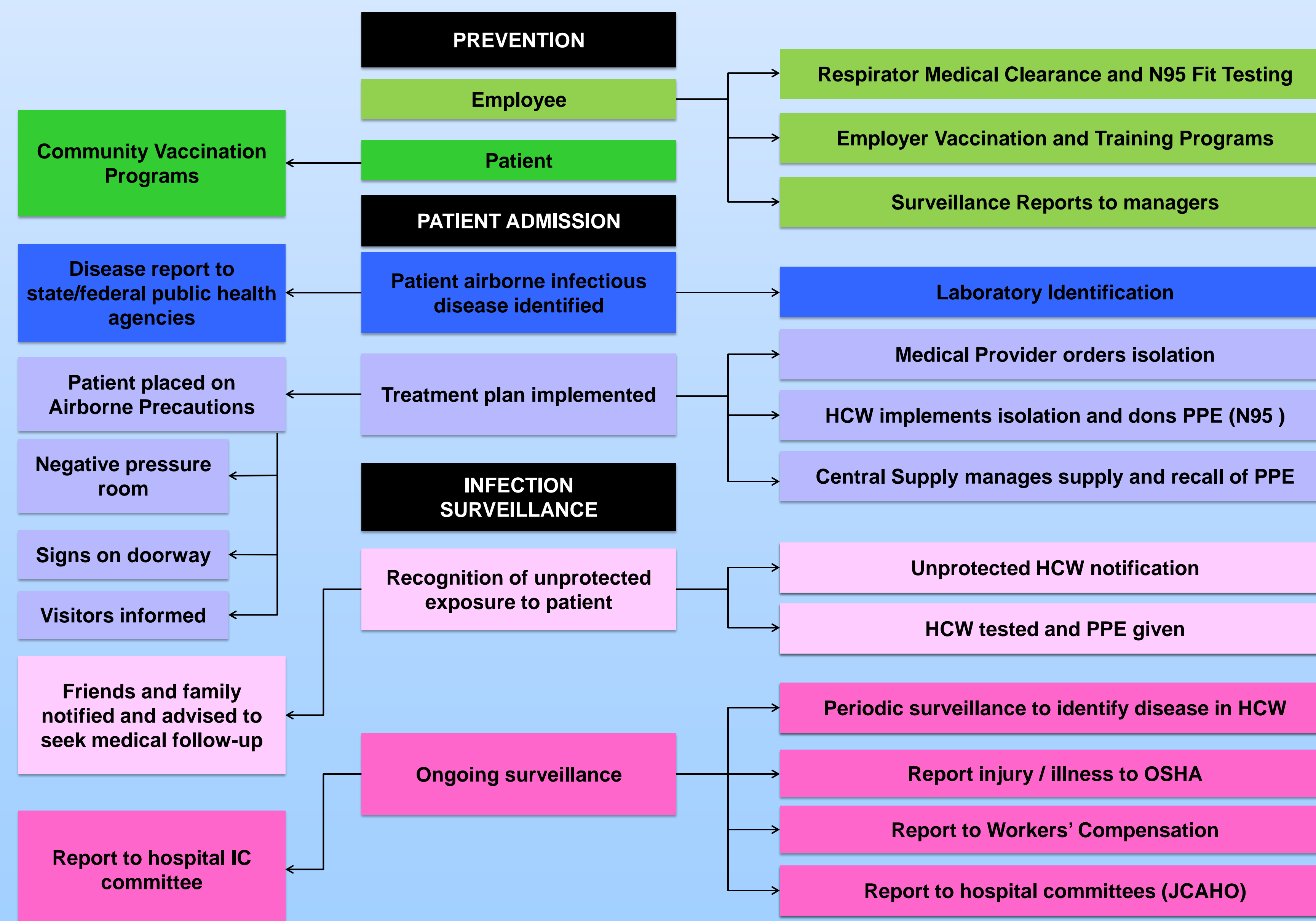


Figure 2 is a model of how a respiratory safety program is enacted in a hospital, what happens at each stage of the safety program, what measures could be used to assess the effectiveness of the safety program, and what database sources could be used here to provide information on those measures.

Results

- Documented and described existing system at VUMC
See companion poster for more detail
- Described the process needed to monitor the operations
Figure 2 column two
- Identified data collection points to be used in the system
Figure 2 columns one and three

Next Steps

- Pilot expanded system at Vanderbilt
- Produce formal needs assessment document
- Roll the system out to 5 large hospital systems
- Incorporation into a national system (Figure 3)

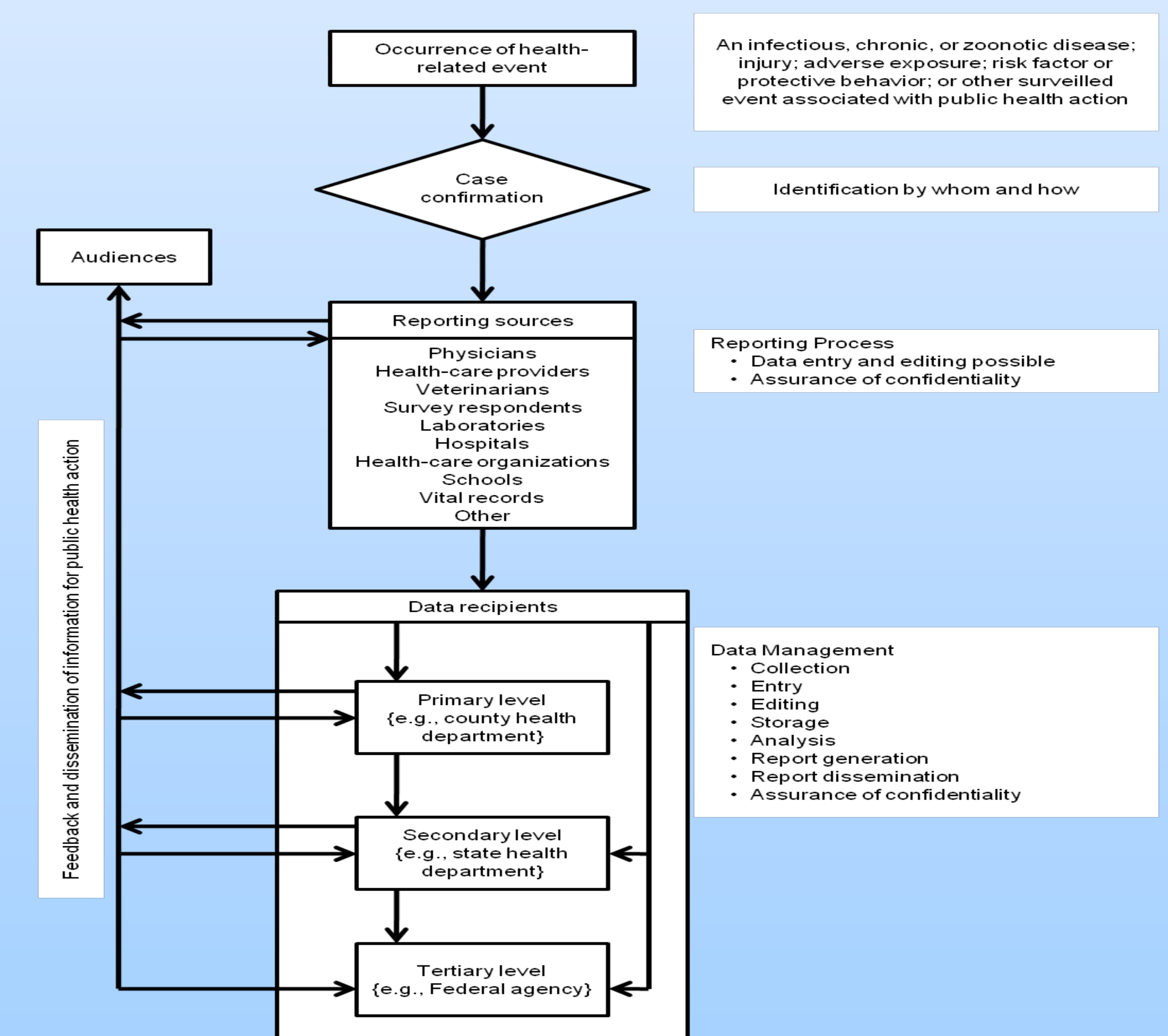


Figure 3. Simplified Flow Chart of a National Surveillance System

Disclaimer

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